ABSTRACT OF THE DISCLOSURE

An electromagnetic wave detecting device which includes a semiconductor film that generates a charge upon induction by an electromagnetic wave, and an active matrix array for reading out the charge generated in the semiconductor film, detects the electromagnetic wave by a direct converting system. The electromagnetic wave detecting device has a characteristic that the active matrix array is formed by having a resin substrate as its base. Since resin has a less weight and a superior impact resistance than glass, it makes an active matrix substrate difficult to break, while improving portability and mobility.